

INTERIM CHANGE TO MFTRP 1B

ITEM 47

SATELLITE MOTOR SURVEILLANCE SERVICE (SNS)

1. Satellite Motor Surveillance Service (SNS) requires the Carrier and its chosen Vendor (see paragraph 5) to carefully follow the detailed technical instructions of this ITEM so that DTTS (see paragraph 4) is advised of

- a. Periodic updates of the location and status of the shipment, as described in paragraph 8.
- b. All emergency situations. (see paragraphs 6 and 9)

2 To request SNS, shipper will notify the carrier in advance (48 hours or more if possible) and annotate the BOL as follows:

“Satellite Motor Surveillance Service (SNS) requested. In the event of SNS system failure, driver will immediately notify dispatcher who will contact DTTS at 1-800-826-0794. In such cases, driver must subsequently provide DTTS a telephonic location/status report every four (4) hours, with a final telephonic report upon delivery at destination.”

3. SNS is included in the linehaul charge, however, carrier must enter a charge of SNS(1) \$00.00 per mile, subject to a minimum charge not to exceed SNS(2) \$00.00 per vehicle or dromedary on the tender in order to provide the service.

4. The Defense Transportation Tracking System (DTTS) is an automated system managed by the US Navy which uses satellite technology to track selected shipments on a round-the-clock basis. The DTTS Program Manager can be contacted at:

tel: 301-744-6058

fax: 301-744-6087

5. The Vendor is a commercial company, which:

- a. is employed by the carrier for the purposes of jointly providing SNS service; and
- b. is qualified by DTTS. To qualify, a prospective vendor must contact DTTS, which will review the company's capabilities. If found suitable to proceed to a test phase, DTTS will then require the prospective vendor to demonstrate its abilities to meet SNS requirements by conducting one or more shipments under various conditions. If DTTS determines that that all (including FCC) requirements have been satisfied, it will advise MTMC that the vendor is approved for SNS service.

6. An EMERGENCY is defined as any “situation” associated with an SNS shipment that endangers the general public, the carrier's personnel/equipment/facilities, the shipment, or threatens national security. The broad term “situation” includes, but is not limited to, accidents, fire, hijacking, theft, civil disturbance, and threatened or real attack. All accidents shall be considered emergencies.

7. Vendors and carriers must collectively meet the following general requirements

- a. A carrier truck newly equipped with SNS capability or re-equipped for maintenance or upgrade reasons must be registered and successfully tested by DTTS prior to being included in the DTTS Cross References File of trucks authorized to provide SNS service. Registration must include: (a) power unit (tractor) number, (b) satellite transceiver identification number (not to exceed 16 upper case ASCII alphanumeric printable characters), (c) the manufacturer, model year, and color of the power unit, and any

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other characteristics of the power unit to help DTTS successfully identify it to POLICE in the event of an EMERGENCY.

b. Vendor will maintain a separate mail box/transfer file to hold DTTS hourly (routine) vehicle location reports and status messages. Data from all carriers utilizing the services of this vendor will be entered into one government mail box/transfer file for downloading by the DTTS. Data for any given satellite transmission destined for DTTS will be maintained on-line until successfully transferred by the DTTS central site computer. EMERGENCY messages will be transferred immediately to DTTS in accordance with paragraph 9 below. Data that has been successfully transferred to DTTS will be deleted by the vendor from the DTTS mail box/transfer file.

c. SNS equipment installed on carrier vehicles, including the emergency alert feature, must be Y2K compliant and provide 24-hour uninterrupted service, including 2-way communication capability between the driver and dispatcher while transporting a DOD shipment. (Exception: when vehicles are in an authorized protected environment, such as a carrier terminal or military secureholding.) Additionally, the carrier SNS monitoring station must be continually manned by a qualified individual capable of providing prompt professional assistance in response to DTTS inquiries when an SNS shipment is in-transit on one of its trucks. The carrier must also ensure that the Vendor provides continuous messaging and positioning service, including immediate notification of EMERGENCY button activations by drivers.

8. TRACKING PROCEDURES/REQUIREMENTS:

a. Enabling DTTS Service:

(1) Prior to beginning SNS for a shipment, normally when initially arriving at a shipment pickup point, the vehicle driver will enable DTTS tracking by transmitting a message alerting the carrier's Vendor to begin entering subsequent shipment location and status change message packets into the DTTS mail box/transfer file. Alternatively, this function may be performed by the carrier dispatcher or other carrier official.

(2) The Vendor will provide the driver with "on-screen" verification that DTTS service has been enabled. The driver will not send any other DTTS messages or depart a protected environment with the shipment until receiving this verification.

(3) The Vendor will report initialization of SNS service from the driver in the DTTS mail box/transfer file as a standard DTTS message using the "B" status message.

b. Loading. When loading any new shipment on the vehicle, the driver will send an "L" status message. The text portion will include the shipment pickup point and the shipment ID (BOL Number, etc.) for each shipment being loaded.

c. Departing Protected Environment. Immediately upon departing origin or any other protected environment, the driver will provide DTTS with a "D" status message.

d. Equipment/System Problems Enroute. In the event of SNS equipment or system failure while in transit, the driver will immediately notify his/her dispatcher, who will in turn immediately contact DTTS at 1-800-826-0794. The driver will subsequently provide DTTS a telephonic location/status report every four (4) hours, with a final telephonic report upon delivery at destination.

e. Changes in Shipment Status. After departing origin with a shipment, the driver will report any change in the shipment in-transit status (e.g., in carrier terminal, transferring the shipment to another vehicle, on a military installation, etc.) using one of the standard messages in paragraph 10. Whenever a shipment is physically removed from a tractor while enroute (e.g. a trailer is disconnected from a tractor while in a military safe haven, the driver will send an "C" status message.

f. Hourly Updates. At least one hourly position report, which may include automatic status "P" reports, must be received whenever the shipment is not in a protected environment, i.e., in "D" shipment status. While in authorized protected environments, providing hourly updates is at carrier's option.

g. Carrier Terminal. Driver will send a "T" status message when entering a carrier terminal. DTTS assumes shipments that enter a terminal on a given vehicle may not depart on that same vehicle. Prior to departing a terminal with a DTTS shipment, drivers will utilize the same procedures as when picking up and departing origin. This includes:

(1) Enabling DTTS service. (subparagraph a)

(2) Sending an "L" status message listing the terminal location and the shipment ID of all shipments on the vehicle subject to DTTS tracking. (subparagraph b)

(3) Sending a "D" status message immediately upon departing the terminal. (subparagraph c)

h. Awaiting Offload. Upon arriving at the destination for a DTTS shipment, the driver will send an "A" status message.

i. Offload at Destination. When a shipment has been physically offloaded at destination, the driver will send an "O" status message.

j. Disabling DTTS Service.

(1) After the last DTTS shipment has been offloaded, the driver will immediately send a message alerting the carrier's SNS vendor to stop entering subsequent shipment location and status change message packets into the DTTS mail box/transfer file. Alternatively, this function may be performed by the carrier dispatcher or other carrier official.

(2) The Vendor will provide the driver with "on-screen" verification that DTTS service has been disabled.

(3) The Vendor will report this discontinuance of SNS service in the DTTS mail box/transfer file as a standard DTTS message using the "S" message status.

9. Emergency Messages. The driver will immediately report an EMERGENCY by pressing (with a single stroke) a special emergency button. This button must be located in the vehicle within easy reach of the driver. Total elapsed time, from pressing of the EMERGENCY button by the driver to Vendor notification to DTTS, shall not exceed 2 minutes.

a. The Vendor will immediately transfer any EMERGENCY message received to DTTS via automatic computer interface. Notification of the incoming EMERGENCY and attempted transfer to DTTS will simultaneously be passed to Vendor staff. As a back-up step, Vendor staff will immediately notify DTTS via telephone at 1-800-826-0794 if they determine the attempted automatic computer interface transfer was unsuccessful.

b. DTTS will provide necessary login, password, and telephone numbers for computer interface. Computer interface will be accomplished using dialup line, async communication meeting or exceeding 2400 bps; or other mutually-agreed methodology. Messages will be transferred using XMODEM file transfer protocol, or other mutually agreed protocol. Vendor shall bear the cost of connecting to the DTTS computer by dial-up line.

c. EMERGENCY messages will use the standard interface record layout per paragraph 10 below, with a status code of "E". If phone interface is used, the Vendor must provide all of the data elements specified in the standard record layout.

d. The carrier has primary responsibility for notifying POLICE in the event of an EMERGENCY.

e. If a driver wishes to test an EMERGENCY button, a "U" status message advising DTTS of the intended test should be sent to DTTS at least one hour prior to the EMERGENCY button being pressed. Alternatively, a telephone call may be made to the DTTS central site just prior to the button being pressed.

10. Standard Interface. Vendor will use the following standard interface structure to transfer driver messages and position reports to DTTS:

a. Communication. The Vendor will provide the capability for the DTTS computer to connect to the Vendor computer using a dialup line meeting or exceeding 2400 bps asynchronous communication, or other mutually agreeable methodology. DOD will pay the cost of connecting to the Vendor computer by dial-up line, except when Vendor elects to provide access via a toll-free line.

b. Handshaking. At Vendor discretion, preliminary handshaking may be required after DTTS has connected to the Vendor computer. This may include verification of a login/password provided by the Vendor and passing of a request to transfer data in the DTTS mail box.

c. File transfer protocol. Data will be transferred using XMODEM file transfer protocol, or other mutually-agreed protocol.

d. Record layout. Status/position messages will be transferred as variable length records delimited by an ASCII LF (decimal 10). Following transfer of the last record in the mail box/transfer file, which will also be delimited by an LF, the vendor will transmit an end of file marker (decimal 26). With the exception of record and end of file delimiters, all data elements will consist of ASCII printable characters. Each record will use the following format:

Field	Offset	Length	Picture	Remarks
Transmitter ID	0	16	16X	
Latitude	16	7	6N1A	NOTE 1
Longitude	23	8	7N1A	NOTE 2
Date/Time	31	14	14N	NOTE 3
Reserved	45	12	12X	NOTE 4
Shipment Status	57	1	1A	NOTE 5
Text	58	60	60X	NOTE 6

NOTE 1: First 6 bytes use format DDMMSS. Last alpha character indicates either "N" (North) or "S" (South) Latitude, e.g., 390108N.

NOTE 2: First 7 bytes use format DDDMMSS. Last alpha character indicates "W" (West) or "E" (East) Longitude, e.g., 0960803W.

NOTE 3: Data (Greenwich Mean Time) of position report expressed in the format MMDDYYYYHHMMSS, e.g., 08151988091533 = August 15, 1988, 09 hours, 15 minutes, 33 seconds (GMT).

NOTE 4: Reserved for future use, e.g., sensor status readings.

NOTE 5: Current status using following codes:

B = Begin Tracking (Text message optional) This packet provides an audit trail of the date/time the driver implements the requirement in paragraph 8 to begin sending data to the DTTS mailbox.

L = Loading New DTTS Shipment. In text portion of data packet, provide activity name and each BOL subject to DTTS tracking being loaded on the vehicle. If this exceeds space provided for one text message, submit as many additional status "L" message packets as necessary.

D = Departing Protected Environment. Used to provide notice of departure from a military/commercial activity, carrier terminal, or other protected environment where the previous shipment status would have been L, T, M, A or O. Status code D places the shipment into a movement status for DTTS tracking purposes, and hourly position reports are required.

P = Current Position. (No text message) This packet may be preprogrammed by the vendor to automatically generate location data at the required hourly intervals. The position reported must be within one-quarter mile of the actual vehicle location.

T = Carrier Terminal. In text portion of data packet, provide location of terminal, area code, and phone number the DTTS staff can use to obtain further information, if necessary.

C = Changing Equipment. Whenever a shipment is transferred from one tractor to another, provide the identification number(s) of the new tractor(s) and the BOL number. Example: "800, C222222201." If this exceeds space provided for one text message, submit as many additional status "C" message packets as necessary. (The driver of a tractor receiving a DTTS shipment will follow procedures in paragraph 8a(1), while the driver of a tractor terminating a DTTS shipment will follow procedures in paragraph 8j.)

U = Unusual Delay/Other.

(1) Unusual Delay - explain reason in text portion of message packet.

(2) Other - provide information such as estimated time of arrival at destination which is not covered under other status message packets, or explain an emergency situation message.

M = Military Secureholding. In text portion of data packet, provide activity name, area code and phone number the DTTS staff can use to obtain further information, if necessary.

A = Arrived at Activity and Awaiting Off load. This status code should be sent only if the arriving truck already has a DOD ordnance shipment on it being transported under SNS. In text portion of data packet, provide activity name and, if a commercial activity, an area code and phone number through which the driver can be reached.

O = Offload. In text portion of data packet, provide activity name and each BOL number delivered to that activity. If this exceeds space provided for one text message, submit as many additional status "O" message packets as necessary.

E = EMERGENCY Situation. No text message. This message packet is automatically generated when the single stroke emergency button is pressed in the truck. When the vendor receives the message, it will immediately be passed to DTTS using procedures in paragraph 9.

S = Stop Tracking. (text message optional) This packet provides an audit trail of the date/time the driver implements the requirement in paragraph 8j above to stop sending data to the DTTS mailbox.

NOTE 6: If there is no text field, record should be terminated by a record delimiter or end of file delimiter, as appropriate, at this offset. If the text message is less than 60 characters, trailing spaces should be truncated and the record delimiter should follow the last valid character.

Legend:

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A = Alpha character, A to Z (upper case ASCII printable character). Left justified, space (decimal 32) filled.

N = Numeric character, 0 to 9, (ASCII printable character). Right justified, zero filled.

X = Alpha numeric character, 0 to 9/A to Z (upper case ASCII printable character). Left justified, space (decimal 32) filled.

11. Message packets with status of B, L, D, T, C, U, M, A, O or S will be accumulated in the DTTS mail box/transfer file as they occur. Message packets with status of P will be entered hourly, with no more than one per hour - the most recent. Message packets with status of L, T, M, A or O place the shipment in a non-movement status in a protected environment. Hourly updates with status of P are not required again until after the driver sends a status of D, Departing Protected Environment.

12. Normal message traffic (i.e., all records with status not equal to status of E) will be entered into the Vendor DTTS file which will be downloaded by the DTTS every 15 minutes, or more often if mutually agreeable. This will be accomplished using XMODEM file transfer protocol, or such other protocol as may be mutually agreeable. Transmission will be at a minimum of 2400 BPS. Communications cost of data transfer to the DTTS will be borne by the Government, unless the Vendor elects to pay for such transmissions in order to improve services.

13. Driver initiated messages other than those identified in paragraph 10 will not be placed in the Vendor DTTS mail box/transfer file.

14. Dedicated Lines. When the average number of vehicles being actively tracked by DTTS through a single Vendor consistently exceeds 100, the Vendor will be responsible for procuring, installing, and paying usage costs for a conditioned, dedicated line of at least 2400 bps between the DTTS central site computer and the Vendor computer. At such time, the Vendor and the DTTS Program Manager may agree to establish a non-standard interface in an effort to speed up processing of data received, as long as this interface provides the same message information as would be received using the standard interfaces for new vendors per paragraph 10. Neither party is obligated to agree to a custom interface. Such interfaces must be agreed upon in writing and thoroughly tested prior to implementation.